General

Title

Lymphoma: proportion of patients with Burkitt lymphoma and diffuse large B-cell lymphoma (DLBCL) undergoing treatment with curative intent who have MYC testing prior to treatment.

Source(s)

NHS Scotland, Scottish Cancer Taskforce. Lymphoma clinical quality performance indicators. Edinburgh (Scotland): Healthcare Improvement Scotland; 2015 Sep. 29 p. [16 references]

Measure Domain

Primary Measure Domain

Clinical Quality Measures: Process

Secondary Measure Domain

Does not apply to this measure

Brief Abstract

Description

This measure is used to assess the proportion of patients with Burkitt lymphoma and diffuse large B-cell lymphoma (DLBCL) undergoing treatment with curative intent who have MYC testing prior to treatment.

Note from the National Quality Measures Clearinghouse: This measure is part of the Cancer Quality Performance Indicators (QPIs) collection. For more information, including a complete list of QPI measure sets, please visit the Healthcare Improvement Scotland Web site .

Rationale

Classical cytogenetic or fluorescence in-situ hybridization (FISH) analysis is essential for the diagnosis of Burkitt lymphoma (Parker et al., 2010).

Rearrangements of MYC* in diffuse large B-cell lymphoma (DLBCL) are a strong prognostic factor and will guide treatment options and provide important information to help inform patients and carers about the nature of the disease and prognosis (Tomita et al., 2009).

Deregulation of MYC in DLBCL, as occurs in translocations involving the long arm of chromosome 8, is highly associated with aggressive disease and a poor prognosis. Detection of such a translocation by FISH is an important prognostic factor and will often lead to a change in management (Tomita et al., 2009).

Cases approaching 100% ki67 and with deregulation of p53 (p53+ p21-) need to be investigated for MYC rearrangements to exclude Burkitt lymphoma (Mead et al., 2008). Rearrangements of MYC, particularly in association with t(14;18) remain a strong prognostic factor in DLBCL (Tomita et al., 2009).

*MYC is a regulator gene located on chromosome 8.

Evidence for Rationale

Mead GM, Barrans SL, Qian W, Walewski J, Radford JA, Wolf M, Clawson SM, Stenning SP, Yule CL, Jack AS, UK National Cancer Research Institute Lymphoma Clinical Studies Group, Australasian Leukaemia and Lymphoma Group. A prospective clinicopathologic study of dose-modified CODOX-M/IVAC in patients with sporadic Burkitt lymphoma defined using cytogenetic and immunophenotypic criteria (MRC/NCRI LY10 trial). Blood. 2008 Sep 15;112(6):2248-60. PubMed

NHS Scotland, Scottish Cancer Taskforce. Lymphoma clinical quality performance indicators. Edinburgh (Scotland): Healthcare Improvement Scotland; 2015 Sep. 29 p. [16 references]

Parker A, Bain B, Devereux S, Gatter K, Jack A, Matutes E, Rooney N, Ross F, Wilkins B, Wotherspoon A, Ramsay A. Best practice in lymphoma diagnosis and reporting. London (UK): British Society for Haematology; 2010 Jan. 51 p.

Tomita N, Tokunaka M, Nakamura N, Takeuchi K, Koike J, Motomura S, Miyamoto K, Kikuchi A, Hyo R, Yakushijin Y, Masaki Y, Fujii S, Hayashi T, Ishigatsubo Y, Miura I. Clinicopathological features of lymphoma/leukemia patients carrying both BCL2 and MYC translocations. Haematologica. 2009 Jul;94(7):935-43. PubMed

Primary Health Components

Burkitt lymphoma; diffuse large B-cell lymphoma (DLBCL); curative intent; MYC testing

Denominator Description

All patients with Burkitt lymphoma and diffuse large B-cell lymphoma (DLBCL) undergoing treatment with curative intent

Numerator Description

Number of patients with Burkitt lymphoma and diffuse large B-cell lymphoma (DLBCL) undergoing treatment with curative intent who have MYC testing prior to treatment

Evidence Supporting the Measure

Type of Evidence Supporting the Criterion of Quality for the Measure

A clinical practice guideline or other peer-reviewed synthesis of the clinical research evidence

A formal consensus procedure, involving experts in relevant clinical, methodological, public health and organizational sciences

One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed journal

Additional Information Supporting Need for the Measure

Unspecified

Extent of Measure Testing

The collection of data is piloted on a small number of patient records using a paper data collection form produced by Information Services Division (ISD). The aim is to identify any anomalies or difficulties with data collection prior to full implementation. At least one NHS board in each Regional Cancer Network participates in the pilot.

Evidence for Extent of Measure Testing

NHS Scotland. National cancer quality performance indicators: overview of development process. Edinburgh (Scotland): NHS Scotland; 2012 Dec. 7 p.

State of Use of the Measure

State of Use

Current routine use

Current Use

not defined yet

Application of the Measure in its Current Use

Measurement Setting

Ambulatory/Office-based Care

Ambulatory Procedure/Imaging Center

Hospital Outpatient

Professionals Involved in Delivery of Health Services

not defined yet

Least Aggregated Level of Services Delivery Addressed

Single Health Care Delivery or Public Health Organizations

Statement of Acceptable Minimum Sample Size

Unspecified

Target Population Age

Unspecified

Target Population Gender

Either male or female

National Strategy for Quality Improvement in Health Care

National Quality Strategy Aim

Better Care

National Quality Strategy Priority

Prevention and Treatment of Leading Causes of Mortality

Institute of Medicine (IOM) National Health Care Quality Report Categories

IOM Care Need

Living with Illness

IOM Domain

Effectiveness

Data Collection for the Measure

Case Finding Period

Unspecified

Denominator Sampling Frame

Patients associated with provider

Denominator (Index) Event or Characteristic

Clinical Condition

Therapeutic Intervention

Denominator Time Window

not defined yet

Denominator Inclusions/Exclusions

Inclusions
All patients with Burkitt lymphoma and diffuse large B-cell lymphoma (DLBCL) undergoing treatment with curative intent

Exclusions
None

Exclusions/Exceptions

not defined yet

Numerator Inclusions/Exclusions

Inclusions
Number of patients with Burkitt lymphoma and diffuse large B-cell lymphoma (DLBCL) undergoing treatment with curative intent who have MYC* testing prior to treatment

**MYC* is a regulator gene located on chromosome 8.

Exclusions
None

Numerator Search Strategy

Fixed time period or point in time

Data Source

Electronic health/medical record

Paper medical record

Type of Health State

Does not apply to this measure

Instruments Used and/or Associated with the Measure

Unspecified

Computation of the Measure

Measure Specifies Disaggregation

Does not apply to this measure

Scoring

Rate/Proportion

Interpretation of Score

Desired value is a higher score

Allowance for Patient or Population Factors

not defined yet

Standard of Comparison

not defined yet

Prescriptive Standard

Target: 60%

The tolerance within this target accounts for situations where there is no fresh tissue for cytogenetic analysis and there is insufficient tissue for fluorescence in-situ hybridization (FISH) studies. Furthermore, MYC testing may not be appropriate if patients are not suitable for more intensive treatment, i.e., for factors of fitness or due to co-morbidities.

Evidence for Prescriptive Standard

NHS Scotland, Scottish Cancer Taskforce. Lymphoma clinical quality performance indicators. Edinburgh (Scotland): Healthcare Improvement Scotland; 2015 Sep. 29 p. [16 references]

Identifying Information

Original Title

QPI 4 – cytogenetic testing.

Measure Collection Name

Cancer Quality Performance Indicators (QPIs)

Measure Set Name

Lymphoma

Submitter

NHS Scotland - National Government Agency [Non-U.S.]

Scottish Cancer Taskforce - National Government Agency [Non-U.S.]

Developer

NHS Scotland - National Government Agency [Non-U.S.]

Scottish Cancer Taskforce - National Government Agency [Non-U.S.]

Funding Source(s)

Scottish Government

Composition of the Group that Developed the Measure

Lymphoma QPI Development Group

Financial Disclosures/Other Potential Conflicts of Interest

Unspecified

Adaptation

This measure was not adapted from another source.

Date of Most Current Version in NQMC

2015 Sep

Measure Maintenance

The Cancer Quality Performance Indicators (QPIs) will be kept under regular review and be responsive to changes in clinical practice and emerging evidence.

Date of Next Anticipated Revision

Unspecified

Measure Status

This is the current release of the measure.

Measure Availability

Source document available from the Healthcare Improvement Scotland Web site .

For more information, contact the Healthcare Improvement Scotland at Gyle Square, 1 South Gyle Crescent, Edinburgh, Scotland EH12 9EB; Phone: 0131 623 4300; E-mail: comments.his@nhs.net; Web site: www.healthcareimprovementscotland.org/ .

Companion Documents

The following is available:

> NHS Scotland. National cancer quality performance indicators: overview of development process. Edinburgh (Scotland): NHS Scotland; 2012 Dec. 7 p. This document is available from the Healthcare Improvement Scotland Web site .

NQMC Status

This NQMC summary was completed by ECRI Institute on June 13, 2017.

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Production

Source(s)

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